

Importance of Safe Sleep

Every year in the United States, there are about 3,500 sudden unexpected infant deaths (SUID), including those from sudden infant death syndrome (SIDS), accidental suffocation or strangulation in bed, and unknown causes. From 2012-2017, SIDS was the 4th leading cause of death for Missourians under the age of one year.¹ The American Academy of Pediatrics recommends infants share a room, not a bed, with their parents for at least 6 months to reduce the risk of SIDS.² Additional recommendations include placing the infant to sleep on his or her back, alone, and in a crib or bassinet. The Missouri PRAMS survey covers a variety of topics regarding how mothers of a recent live birth are placing their new infant to sleep.

Pregnancy Risk Assessment Monitoring System (PRAMS)

PRAMS collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after delivery. PRAMS surveys are typically completed 2 to 6 months after delivery. PRAMS data have been collected in Missouri since 2007, and included in the national estimates every subsequent year but 2008. PRAMS data are used to assess progress towards Healthy People goals. The weighted response rate for Missouri PRAMS during 2012-2017 was 66.8%.

National Goals to Decrease Infant Deaths

Healthy People 2020 Objective	Healthy People 2020 goal ³	Missouri 2017
Reduce rate of infant deaths from sudden unexpected infant deaths	0.84 infant deaths per 1,000 live births	1.21*
Increase proportion of infants who are put to sleep on their backs	75.8%	81.9% [†]

*Source: Missouri DHSS Vital Statistics. [†]Source: Missouri PRAMS 2017.

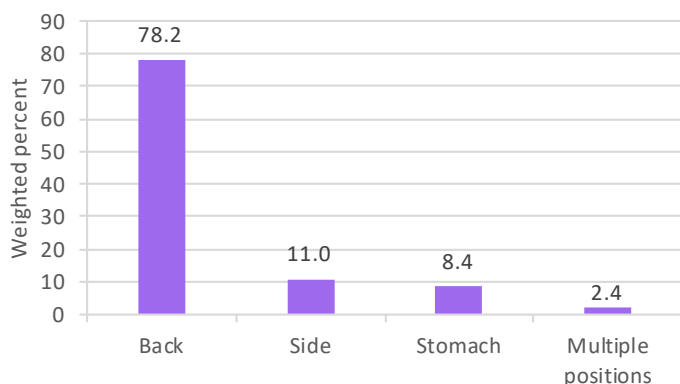
Infant Sleeping Positions

In 2016, the American Academy of Pediatrics released a list of recommendations for a safe infant sleep environment. The first recommendation is to put the infant on his or her back to sleep for every sleep, including naps.

American Academy of Pediatrics Safe Sleep Recommendations² that all mothers can do:

- Back to sleep for every sleep
- Use a firm sleep surface
- Breastfeeding is recommended
- Room-sharing (not bed-sharing) for at least 6 months
- No soft objects or loose bedding in sleep space
- Offer pacifier when putting to sleep
- Avoid smoking exposure (before and after pregnancy)
- Avoid alcohol and illicit drugs
- Avoid overheating and head covering
- Receive prenatal care during pregnancy
- Infant should be immunized
- Supervised, awake tummy time is recommended
- Avoid commercial devices that are inconsistent with safe sleep recommendations

Infant Sleep Positions,
Missouri PRAMS 2012-2017



Missouri PRAMS: Safe Sleep

Back to Sleep

PRAMS data can be used to examine the demographics of mothers who **do not** put their infant to sleep on their back, Missouri PRAMS 2012-2017.

	Adjusted Odds Ratios	95% Confidence Intervals		
		Lower CI	Higher CI	P-value
Compared to White, non-Hispanic women				
Black, non-Hispanic	2.3*	1.9	2.9	<0.0001
Hispanic	1.2	0.8	1.7	
Other, non-Hispanic	1.5	1.1	2.0	
Compared to Women 20-34 Years of Age				
Less than 20 years	1.0	0.8	1.5	0.936
35 years old and greater	1.0	0.8	1.3	
Compared to Women with 12 Years of Education				
Less than 12 years	1.4*	1.0	1.8	<0.0001
More than 12 years	0.7	0.6	0.9	
Compared to Women with Annual Income over 250% of Federal Poverty Level (FPL)				
Income Less than 250% FPL	1.8*	1.4	2.2	<0.0001
Compared to Women who Live in Urban Areas				
Rural	1.3*	1.1	1.5	0.0029
Compared to Women who are Married				
Unmarried	1.2	1.0	1.4	0.0805

What is an Adjusted Odds Ratio?

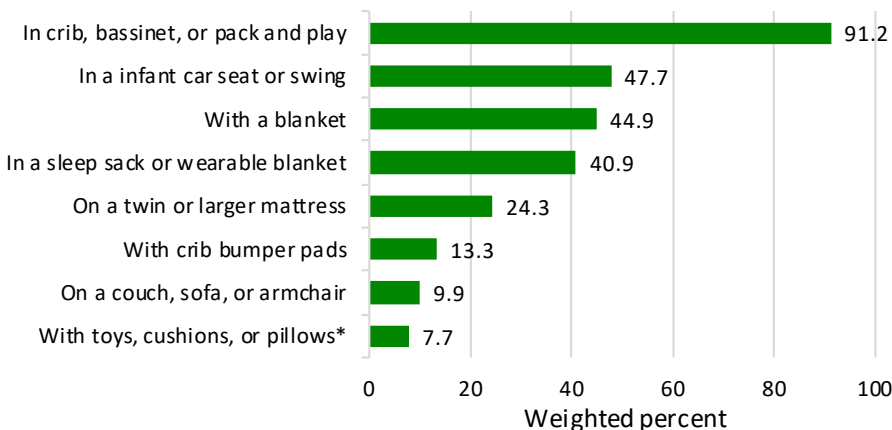
Adjusted odds let you know how likely one group is to be at risk when compared to another while other factors (such as age, education, and race) are held constant. The comparison group is in light purple in the table to the left. Significant differences between groups are marked with an asterisk (*); otherwise, the groups were found to be similar in their risk. For example, Black non-Hispanic women have significantly greater odds of not putting their baby to sleep on their back when compared to White, non-Hispanic women.

Safe Sleep Environment and Room-Sharing

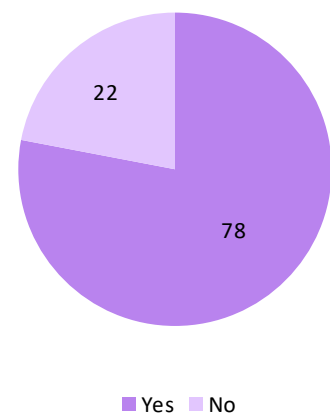
In addition to assessing sleep position, Missouri mothers were asked about their baby's sleep environment. In 2017, PRAMS data showed that most mothers placed their babies to sleep in a crib (91.2%). Nearly half of mothers reported having their baby sleep in an infant car seat or swing (47.6%). Nearly one out of ten women (9.9%) reported that their baby sleeps on a couch, sofa, or armchair. Only 1 in 13 mothers (7.7%) said that their baby sleeps with toys, cushions, or pillows.

Room-sharing, where the new baby shares the parent's room but sleeps in his or her own crib or bassinet close to the parent's bed, is suggested for at least 6 months but preferably 12 months.² Room-sharing can decrease the risk of SIDS or other sleep-related infant death by 50%.⁴ More than 3 in 4 mothers (78.1%) room-shared with their infant at the time of the PRAMS survey.

Baby Sleep Practices, Missouri PRAMS, 2017



Room-Sharing, Missouri PRAMS 2017

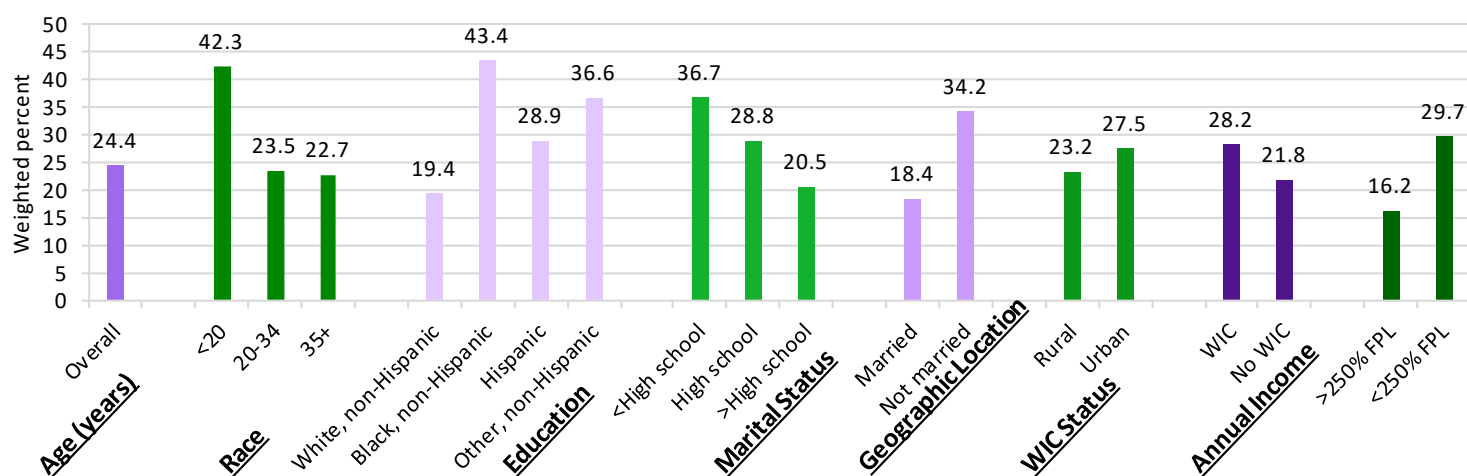


Missouri PRAMS: Safe Sleep

Bed-Sharing

Bed-sharing, the act of sharing a sleep surface with an infant, is not recommended for babies under the age of 1 year.² Bed-sharing can lead to infant death by accidental strangulation or suffocation due to the presence of soft materials such as blankets, pillows, and sheets.⁴ Room-sharing, where the new baby shares the parent's room but sleeps in his or her own crib or bassinet, is an alternative that will allow the parents to be within close proximity of their new baby, but reduce the risk of accidental death. Mothers who say that their new baby sometimes, rarely, or never slept alone in their own crib or bed in the previous two weeks are considered to bed-share. Mothers that chose to bed-share have a wide range of demographic characteristics, which can be seen below.

Bed-Sharing by Maternal Characteristics, Missouri PRAMS 2017

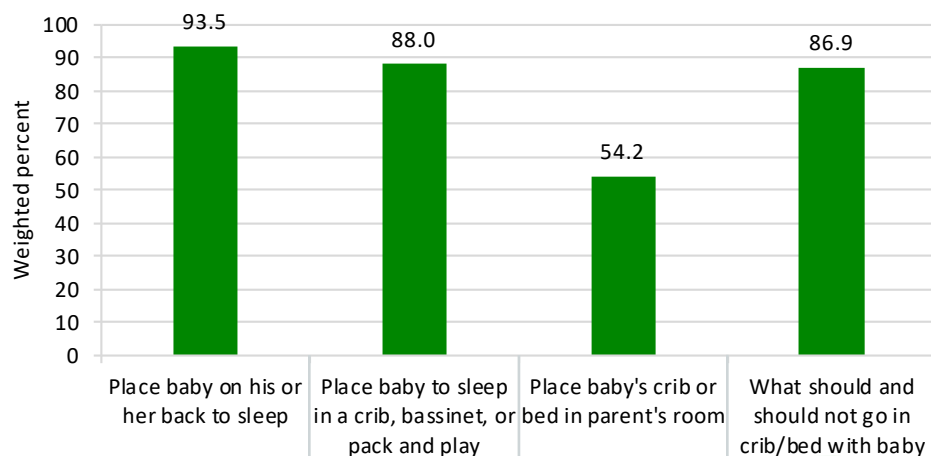


Sleep Education

In an effort to increase awareness about the dangers of unsafe sleep environments, health care providers have an opportunity to provide information about the American Academy of Pediatrics Safe Sleep Recommendations. Beginning in 2016, mothers were asked if their health care provider discussed any of the following topics:

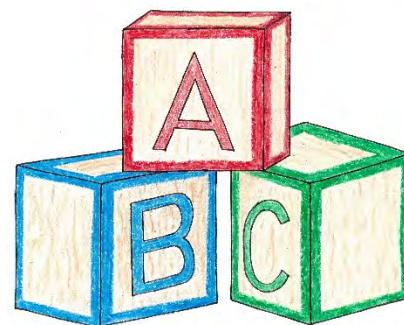
- Placing baby on his or her back to sleep
- Placing baby to sleep in a crib, bassinet, or pack and play
- Placing the baby's crib or bed in the parent's room
- What things should and should not go in bed with baby

Topics Discussed With a Health Care Worker, Missouri PRAMS 2017



ABCs of Safe Sleep

An easy way to remember the key concepts of Safe Sleep is to remember the ABCs:



Alone, on their **B**ack,
in their **C**rib

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Summary

- In 1992, the American Academy of Pediatrics recommended that infants be placed on their backs to sleep to reduce the occurrence of SIDS. Initially, there was a clear decline, but the trend has been stable since 2001, bringing new attention and efforts from public health agencies and medical providers.⁴ In 2016, the American Academy of Pediatrics expanded upon its original recommendations to include all causes of sleep-related deaths, not just SIDS.
- Missouri is exceeding the Healthy People 2020 goal of 75.8% of infants placed on their back to sleep, but more education and outreach is needed to reach those less likely to place their infant to sleep on their back or more likely to practice bed-sharing behaviors.
- Bed-sharing is not recommended, but discouraging it may be difficult or sensitive since the practice is common in many cultures and families. The recommendation of discouraging bed-sharing is based on evidence that bed-sharing increases the risk of SIDS. The highest risk of SIDS occurs when the mother smokes, has recently consumed alcohol, or is overly tired. Risks are further increased if more than one adult shares the bed with the infant, or if other children also share the bed.

Resources

How to Keep Your Sleeping Baby Safe: AAP Policy Explained: <https://www.healthychildren.org/English/ages-stages/baby/sleep/Pages/A-Parents-Guide-to-Safe-Sleep.aspx>

Safe to Sleep Campaign: <https://safetosleep.nichd.nih.gov/resources>

Children's Trust Fund: <https://ctf4kids.org/public-awareness/awareness-campaigns/safe-crib-safe-sleep/>

Missouri Safe Sleep: <https://health.mo.gov/living/families/babies/safesleep/index.php>

Missouri Safe Cribs: <https://health.mo.gov/living/families/babies/safecribs/>

Missouri PRAMS: <https://health.mo.gov/data/prams/index.php>

References:

¹ Missouri Department of Health and Senior Services. *MOPHIMS*. Death MICA accessed on April 19th, 2019 at <https://healthapps.dhss.mo.gov/MoPhims/MOPHIMSHome>.

² Moon RY and AAP Task Force on Sudden Infant Death Syndrome. SIDS and other Sleep-Related Infant Deaths: Evidence Base for 2016 Updated Recommendations for a Safe Infant Sleeping Environment. *Pediatrics*. 2016;138(5):e20162940

³ Healthy People 2020 accessed on April 19th, 2019 at <https://healthypeople.gov/2020/topics-objectives/topics/maternal-infant-and-child-health/objectives>.

⁴ AAP Task force on Sudden Infant Death Syndrome. SIDS and Other Sleep-Related Infant Deaths: Updated 2016 Recommendations for a Safe Infant Sleeping Environment. *Pediatrics*. 2016;138(5):e20162938

To learn more about PRAMS methods and to see data availability by state and year visit: <https://www.cdc.gov/prams>

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